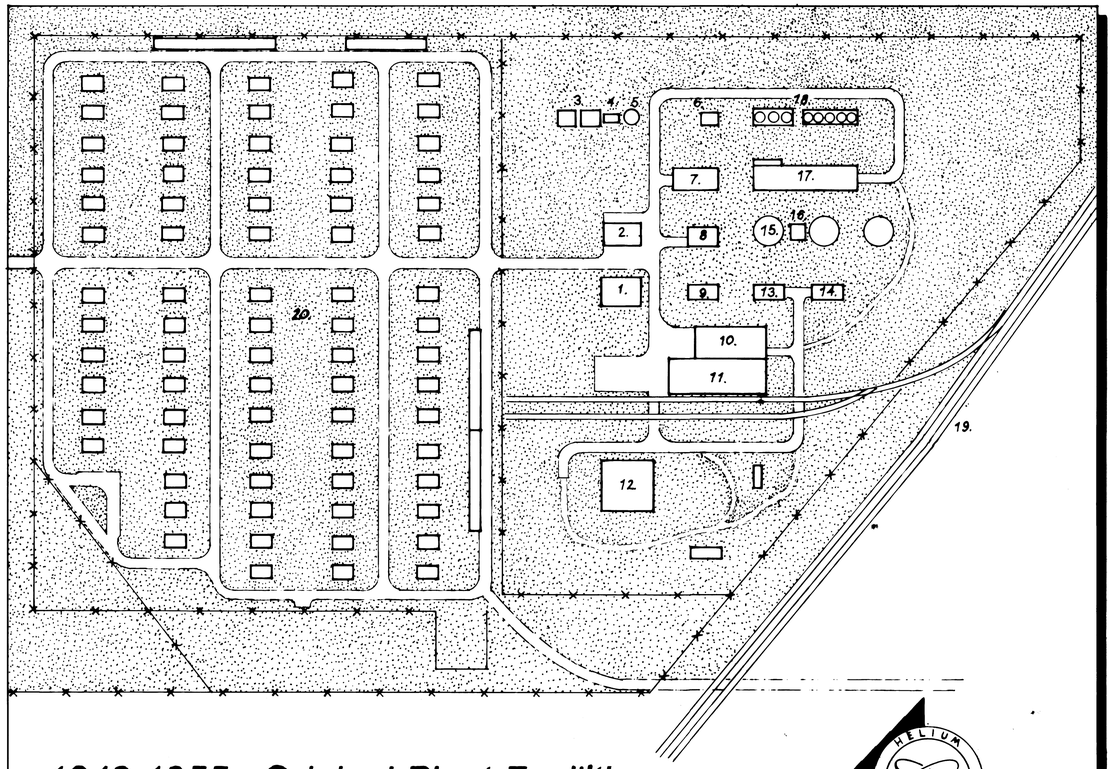
# SITE DEVELOPMENT
## Exell Helium Plant



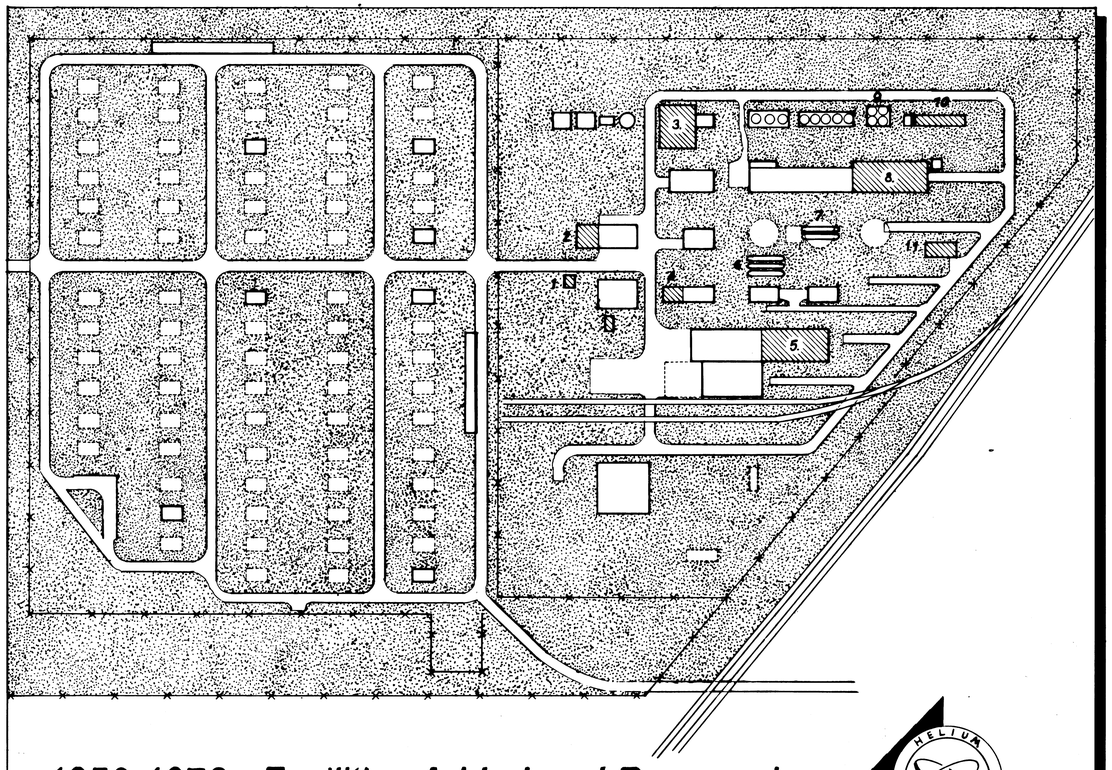

## 1942-1955: Original Plant Facilities

1. Plant Headquarters
2. Garage
3. Settling Basin
4. Pump House
5. Water Tower
6. Gas Treatment Metering House
7. Generator Building
8. Boiler Building
9. Change Building
10. Separation Building
11. Loading Platform
12. High Pressure Storage
13. Machine Shop
14. Lab Welding Building
15. Storage Tank
16. Guard Tower
17. Compressor Building
18. Cooling Towers
19. Atchison-Topeka-Santa Fe Railway
20. Residential Camp

0 100 200
Feet 1" = 140'
0 30 60
Meters (1:1690)

With World War II came a ten-fold increase in helium production. Congress expanded the federal helium program from its lone facility at Amarillo to four more plants in Texas, Kansas, and New Mexico. The Exell Helium Plant, built in 1942-43 by Stearns & Roger Manufacturing of Denver, Colorado, was one of the new facilities. Located near the Panhandle Gas Field 35 miles north of the Amarillo plant, the new facility produced 60 million cubic feet (mmcf) of helium annually. Once operational on March 13, 1943, Exell immediately out-produced all other federal plants. Its modern technology and massive machinery typified America's industrial prowess during and after the war.

In addition to the 27 industrial structures that Stearns & Roger built in 1942-43, the Bureau of Mines authorized construction of employee housing sited just north of the plant. The well-groomed residential area accommodated 75 homes plus recreational facilities. A row of individual one-car garages were built adjacent to, but separate from the housing area. Government housing underscored the need to maintain a readily accessible work force to meet the Exell plant's round-the-clock production schedule during wartime.




## 1956-1978: Facilities Added and Removed

1. Guard House
2. Garage Extension
3. Gas Treatment Building
4. Change Building Extension
5. Separation Building Extension
6. Crude Helium Storage
7. Nitrogen Storage
8. Compressor Building Extension
9. Cooling Tower
10. Jacket Water Cooler
11. Pump House

Existing Facilities
Facilities Added
Facilities Removed

0 100 200
Feet 1" = 140'
0 30 60
Meters (1:1690)

To meet the postwar needs for helium during the the early Cold War years, Exell expanded in 1956 and again in1960. As a result of the 1956 expansion, production capacity increased from 60 to 150 mmcf per year. Still, because of skyrocketing demands from the atomic energy, military, and aerospace industries in the late fifties, the federal helium program could not keep pace. With the goal of not only producing, but conserving helium for national defense, Congress approved an additional expansion of the Exell plant in 1960. Six larger capacity separation units replaced the ten smaller ones installed in 1942. In addition, plant managers installed two new purification units. Combined, these improvements increased production capacity from 150 to 300 mmcf per year. By the late 1960's, however, production levels eased. The subsequent decrease in personnel, along with improved highway accessibility, led to the eventual abandonment of the government housing area.

HELIUM PLANTS, EXELL HELIUM PLANT 1943
HIGHWAY 287 N
MOORE COUNTY TEXAS
SHEET 3 of 9
HISTORIC AMERICAN ENGINEERING RECORD TX-105 B

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HELIUM ACTIVITIES RECORDING PROJECT
NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. BUREAU OF MINES, HELIUM OPERATIONS
MASTERSON